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Monitoring of population programmes, focusing on changing population age structures and sustainable development, in the context of the full implementation of the Programme of Action of the International Conference on Population and Development

Report of the Secretary-General

Summary

The period from 2016 to 2030 will be marked by major changes in age structure in countries around the world, including a steady increase in the median age. The differences in age structures among countries will rise to historically high levels during this period, underscoring the importance of countries understanding and responding to their national age structure and trends to ensure optimal policies and programmes for national development. Changing age structure is a central aspect of the implementation of the Programme of Action of the International Conference on Population and Development, which emphasizes individual life transitions and trajectories over the course of demographic transitions. Governments have prioritized efforts to advance progress in sustainable development through demographic dividends, which offer a strategic basis for focusing on and prioritizing investments in empowerment, including through sexual and reproductive health and reproductive rights, education and employment, linked to age structure.

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The present report, prepared by the United Nations Population Fund, provides numerous examples of policies and programmes reflecting the thematic pillars of the International Conference on Population and Development beyond 2014 — dignity and human rights; health, place and mobility; governance and accountability; and sustainability — into which Governments are integrating changes in age structure to achieve the aims of the Programme of Action and the 2030 Agenda for Sustainable Development.

I. Introduction

1. The period from 2016 to 2030 will be marked by major changes in age structure in countries around the world, shaping the demands and policies of national development. As public health gains advance in most countries, global life expectancy will continue to increase, contributing to a rise in the number and proportion of older persons. In many of the countries with the youngest populations, both mortality and fertility are declining, and large cohorts are entering the adolescent and young adult years, offering timely opportunities for a demographic dividend. In countries with sizeable older populations, where low levels of fertility have persisted for several decades, the pace of ageing requires policy changes in working life, pensions and health care to provide for the wealth and well-being of an older society.

2. These changes in age structure are co-occurring with other significant population changes, in particular urbanization and substantial increases in population mobility, both of which were the subject of major global attention in 2016, at the United Nations Conference on Housing and Sustainable Urban Development (Habitat III) and the high-level plenary meeting on addressing large movements of refugees and migrants. In these contexts, population dynamics have consistently been identified as central to the national pursuit of sustainable development.

3. Over the past 50 years, countries have diverged greatly in age structure and now stand far apart. This disparity underscores the absolute importance of now creating policies and programmes for national development that clearly account for the current status of and trends in age structure. The present report reviews policies and programmes reflecting the thematic pillars of the 20-year review of the International Conference on Population and Development beyond 2014 (see A/69/62) — dignity and human rights; health, place and mobility; governance and accountability; and sustainability — in which Governments and other stakeholders are responding to changes in age structure to achieve the aims of the Programme of Action of the Conference and the 2030 Agenda for Sustainable Development.

II. Age structure lens for sustainable development

4. In the 2030 Agenda, Member States recognized the importance of age structure for sustainable development. In paragraph 25 of the 2030 Agenda, they committed to helping their countries to achieve a demographic dividend, with special emphasis on providing children and youth with a nurturing environment for the full realization of their rights and capabilities. Target 17.18 of the Sustainable Development Goals calls for all relevant population-based indicators to be disaggregated by age as a means of ensuring that the impact of development policies on persons of all ages will be monitored and that persons of all ages will have a better chance to participate in, and benefit from, development. In paragraph 34 of the 2030 Agenda, Member States further committed to taking account of population trends and projections in national, rural and urban development strategies and policies.

5. Changing age structure and sustainable development have been a central aspect of the implementation of the Programme of Action by focusing on individual life transitions over the course of demographic transitions. It was recognized in 1994, in the Programme of Action, paragraph 6.16, that dramatic changes in age structure were occurring, driven by declining fertility and reinforced by continued declines in mortality. In its resolution 2012/1 (see E/2012/25), the Commission on Population and Development called upon Governments to promote both intergenerational equity and solidarity by taking into account the implications of the changing age structures of the population in medium- and long-term development planning and by considering the age-related consequences of social and economic policies.

6. Developing countries made great progress in the reduction of child mortality and the achievement of universal primary education during the period of implementation of the Millennium Development Goals, generating significant improvements in child health and well-being. Yet the entry into adolescence marks a critical time, especially for girls, which has too often been neglected.[1] Expanded investment in empowerment, including sexual and reproductive health and reproductive rights, and quality education at this critical juncture has a lifelong effect, and when such investment extends broadly across the population, it results in a surge of human capital into society. When this surge coincides with a demographic bulge of young people owing to declining fertility, the result is an especially high proportion of the population with better health and more education moving into its most productive years. If these young people are met with a society and an economy that offer real opportunities for decent work, the demographic dividend of accelerated development can be reaped in the course of a generation.[2]

7. As people of this generation move through their working ages, they carry with them greater health and well-being. The situation of middle-aged and older persons, their health in later years, their ability to continue to work and their life expectancy are all strongly dependent on the investments that they received earlier in their life course. Having greater incentive to accumulate assets to pay for consumption later in life, a wealthier older population is well positioned to invest in the younger generation, continuing the positive cycle of advancing health, nutrition, education and opportunity. Again, with the right investment, the result can be a sustained development boon known as the second demographic dividend.[3]

8. Figure I indicates how supporting people in their navigation of critical transitions throughout their lives can result in the realization of major returns in the form of improved individual health and well-being and cumulative progress towards

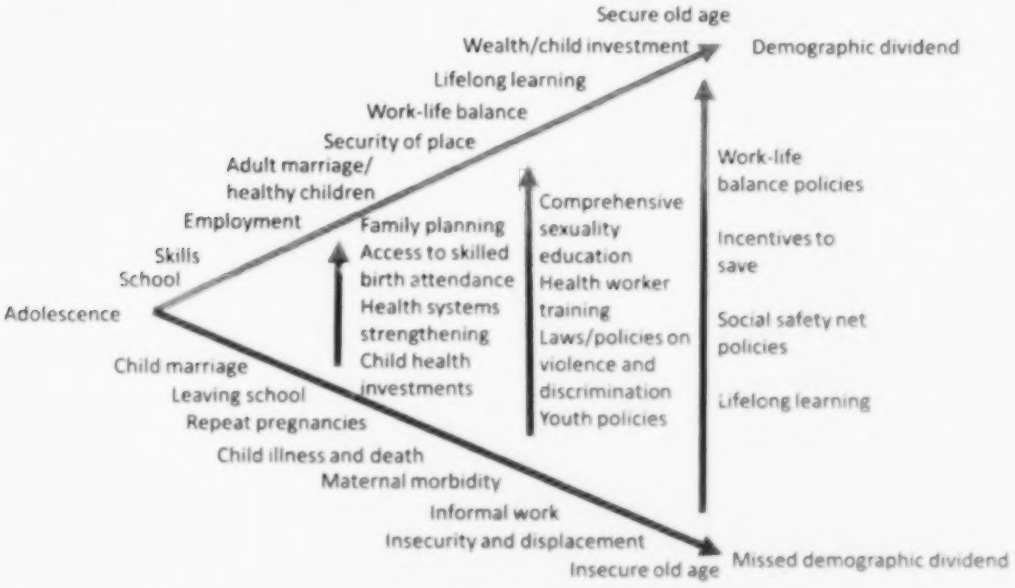
[1] *State of World Population 2016* (United Nations publication, Sales No. E.16.III.H.1).

[2] United Nations Population Fund (UNFPA), "UNFPA: a value proposition for the demographic dividend" (December 2015); ibid., "Sahel women's empowerment and demographic dividend" (June 2016); Kenya National Council for Population and Development, UNFPA and African Institute for Development Policy, "The demographic dividend knowledge-sharing symposium for the East and Southern Africa region", report summary for the symposium held in Nairobi in August 2015; UNFPA and African Institute for Development Policy, "Accelerating human capital development to optimize Zambia's chances of harnessing the demographic dividend", Policy Brief (May 2015).

[3] Ronald Lee Andrew Mason, "What is the demographic dividend?", *Finance and Development*, vol. 43, No. 3 (September 2006).

sustainable development through these demographic dividends. Thanks to major improvements made in child protection, health and education around the world, an emphasis has been placed on transitions beginning at adolescence.

Figure I
Demographic dividends through lifelong investments



Source: United Nations Population Fund, "UNFPA: a value proposition for the demographic dividend" (December 2015).

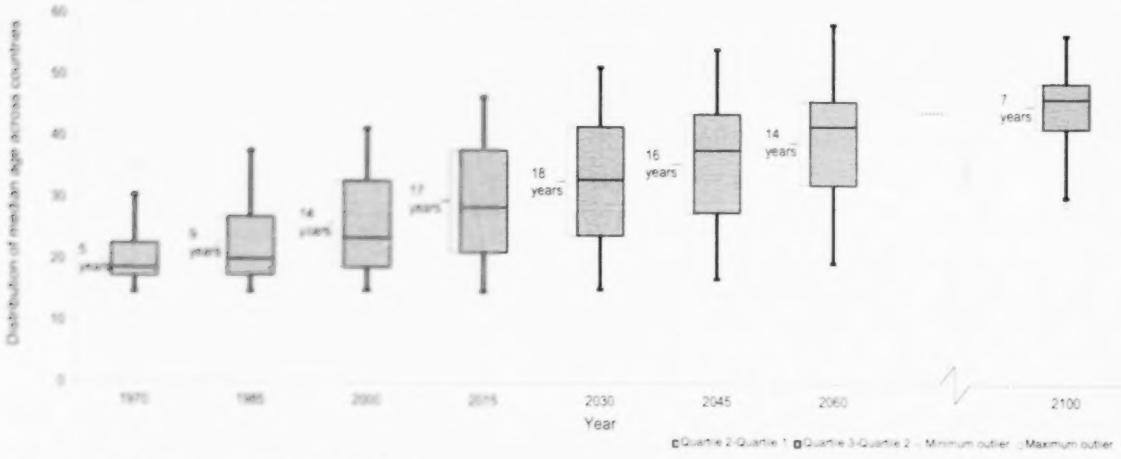
9. A key implication of the demographic dividends and of the array of investments across the life course, as identified in figure I, is that there is no ideal age structure for development. Gains can be realized from diverse age structures, yet when countries do not invest effectively, any age structure can present major challenges, from lack of education for the young to limited work for persons of all ages to insufficient care and social protection for older persons. Furthermore, age structures are dynamic, changing continually and sometimes rapidly. The world is in the process of ageing, with the median age increasing from less than 20 years in 1970 to nearly 30 years today to the expected more than 40 years by 2060. This ageing is occurring at widely differen. rates, with countries found across an extremely wide range. Figure II displays the significant variation in median age in 2015 throughout the world, with country populations ranging from the median age of approximately 15 years to approximately 47 years.

Figure II
Median age by country in 2015

Source: Data extracted from *World Population Prospects*, 2015 revision.

10. Figure III indicates the magnitude of the past, current and future diversity in median age across countries. The current number of years between the 75th and the 25th percentiles of the countries' median age is 17; this number will increase to 18 by 2030 — the high mark, past and future, according to United Nations data and projections. There will be a gradual decrease in this diversity in median age after 2030, declining to just 7 years in 2100. Therefore, it is likely that countries will never again be more diverse in their age structure than during the course of the implementation of the 2030 Agenda. Hence, each country needs good census data, sound demographic projections and analysis, and population-specific solutions. Countries must have the capacity to understand their age structure and to tailor their specific policies and programmes contextually, in order to leave no one behind now or in the future.

Figure III
Diversity in median age across countries, 1970 to 2060 and 2100



Source: World Population Prospects: The 2015 Revision.

Age structure and the 2030 Agenda: reducing poverty and promoting prosperity

11. Incorporating changing age structure into sustainable development is critical for achieving the 2030 Agenda. The theme of the high-level political forum on sustainable development in 2017 is "Eradicating poverty and promoting prosperity in a changing world", and the forum will feature national reviews of progress made on meeting the Sustainable Development Goals related to poverty, nutrition, health, gender equality, infrastructure and oceans. Changing age structure will have an impact on efforts in most of these areas.

12. A wide range of research shows the importance of health (Goal 3) and gender equality (Goal 5) in poverty reduction and prosperity. Improvements in health, a major driver of the ageing of the population, have major effects on economic growth and poverty reduction across the lifespan.[4] Poor health undermines children's ability to attend school and their performance.[5] Within the arena of sexual and reproductive health, the AIDS epidemic has resulted in a decline in the agricultural workforce by 3 to 10 per cent in high-prevalence countries, contributing to food shortages and poverty and affecting the age structure and productivity of the surviving population

[4] Dean T. Jamison and others, "Global health 2035: a world converging within a generation", *The Lancet*, vol. 382, No. 9908 (December 2013).

[5] Karin Stenberg and others, "Advancing social and economic development by investing in women's and children's health: a new global investment framework", *The Lancet*, vol. 383, No. 9925 (April 2014).

over the short and the medium term.[6] Morbidities associated with unsafe abortion have resulted in an estimated 5 million years of productive life lost.[7]

13. Gender inequality also hampers poverty reduction and prosperity, and it limits the returns associated with the demographic dividends. Closing the gender gap in labour-force participation could increase the global gross domestic product (GDP) by nearly 12 per cent by 2030.[8] Important inputs to expanded women's labour-force participation — delayed marriage and childbirth and more education — are also central drivers of demographic transition.

14. Interventions in the area of population and development, including increased access to sexual and reproductive health, are essential for eliminating major barriers to poverty reduction and prosperity. This does not mean that these interventions on their own bring about poverty reduction and prosperity; doing so requires actions across sectors covered by the Programme of Action together with those of many other sectors. Yet without these investments, individuals, communities and societies will suffer as a result of the lost lives, health, capabilities, productivity and prosperity.[9]

III. Sustainable development policies and programmes

15. Many national programmes and policies are designed and delivered in response to changing age structures. These include national investments formulated to advance the goals and aspirations of the Programme of Action and, more recently, to spur achievement of the Sustainable Development Goals.

A. Dignity and human rights

16. The International Conference on Population and Development beyond 2014 review examined progress made in the shared commitment to human rights, non-discrimination and expanding opportunity for all. It highlighted examples of the ways in which poverty and inequality are barriers to many of these achievements. As age structures change, the realization of dignity and human rights necessitates different emphases, from modernizing school curricula to implementing social supports during the reproductive and older ages.

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[6] Joint United Nations Programme on HIV/AIDS (UNAIDS), *2006 Report of the Global AIDS Epidemic* (Geneva, 2006).

[7] Susheela Singh, "Hospital admissions resulting from unsafe abortion: estimates from 13 developing countries", *The Lancet*, vol. 368, No. 9550 (November 2006).

[8] Hillary Clinton, "Unfinished business for the world's women", *The Economist*, 20 November 2014. Based on Organization for Economic Cooperation and Development (OECD) projections of increased female labour participation in OECD Member States, see Angel Gurria, Secretary-General of the Organization for Economic Cooperation and Development, "Gender dynamics: how can countries close the ecoromic gender gap?" speech to the World Economic Forum Annual Meeting, Davos, Switzerland, 25 January 2013. Available from www.oecd.org/economy/genderdynamicshowcancountriesclosetheeconomicgendergap.htm.

[9] Ralph Hakkert and others, *Impacts of Population Dynamics, Reproductive Health and Gender on Poverty* (New York, UNFPA, 2012).

17. The review devoted particular attention to the demographic importance of young people, who constitute an especially large proportion of the population in Africa and parts of Asia. The African Union road map on the demographic dividend, developed jointly with the Economic Commission for Africa, the African Development Bank, the planning and coordination agency of the New Partnership for Africa's Development, UNFPA and other United Nations partners and development agencies, puts forward a vision built on the need to invest broadly in young people. According to the road map, the "demographic dividend lens offers a strategic basis for focusing and prioritizing investments in people in general and youth in particular, in order to achieve sustainable development, inclusive economic growth and to build an integrated, prosperous and peaceful Africa, driven by its own citizens and representing a dynamic force in the international arena".

Generating youth employment in young countries

18. Young people around the world are disproportionately unemployed, underemployed or in highly vulnerable and insecure work. Two thirds of non-student youth in sub-Saharan Africa are in such situations. Just a third to a quarter of the jobs needed by young entrants into the labour market are created each year in sub-Saharan Africa, and many young people are unable to acquire the skills needed to compete for these jobs.[10] Young women in particular are at risk, often unable to enter the labour market owing to a lack of schooling, having to raise children, early or forced marriage or unplanned pregnancy.[11]

19. The African Development Bank is working closely with African Governments on an initiative entitled "Jobs for youth in Africa". A particular emphasis of the initiative concerns agriculture. In sub-Saharan countries, a significant majority of the population remains rural, and agriculture accounts for one third of the economic output and two thirds of the jobs. Amid growing economic inequality in these countries, a 2011 study suggested that a 1 per cent increase in agricultural per capita GDP had reduced the poverty gap five times more than a 1 per cent increase in GDP per capita in other sectors, an effect that was concentrated mainly among the poorest and most vulnerable populations.[12]

20. The initiative focuses on the expansion of youth employment in agriculture, such as through the rural microenterprise programme in low- to lower middle-income countries with large rural populations and a heavy reliance on agriculture. The programme emphasizes capital access, skills training and mentorship for agriculture-based microenterprises, focusing on young women with less than a secondary-level education. Young people receive business training and, on the basis of business plans submitted, seed capital. Given the challenges of land access for youth, gaps in existing value chains, and crops that require limited land will be primary focuses. The programme will include support to young people for becoming

[10] African Development Bank Group, "Bank Group's strategy for jobs for youth in Africa, 2016-2025" (May 2016).

[11] D. Schensul, K. Weny and R. Snow, "Foundations for the future", UNFPA input to the mid-term review of the Istanbul Programme of Action.

[12] African Development Bank Group, "Bank Group's strategy for jobs for youth in Africa", p. 17 (see footnote 10 above).

suppliers for small and medium enterprises, to encourage opportunities in the informal economy and pathways to more formal work.[13]

Policies that are flexible and responsive to age structure change

21. Rapid demographic transition and resulting rapid age structure change require flexible and adaptive policies. The Government of China, over the past 30 years, has structured policy around large proportions of children and young people who then moved into their adult years while being followed by smaller cohorts, driven by a rapid decline in fertility and significant gains in life expectancy. In 1982, people under 25 years of age and over age 60 accounted for 54 per cent and 7.3 per cent of the population, respectively. By 2010, those figures were 33.5 per cent and 13.2 per cent, respectively. It is projected that they will be near even — at about 25 per cent — for each age group in 2030.

22. China instituted nine-year compulsory education in 1986, driving an increase in the literacy rate from 77.2 per cent in 1982 to 96 per cent in 2010. Subsequently, with the success of those investments and a shift in age structure towards older youth and working-age people, China focused its investments on occupational education to develop skills in industrial development and to support young people in finding work in an evolving labour market.

23. A 2011-2020 development plan for children in China emphasizes health and education and includes curriculum-based sexual health education, an area in which UNFPA China is working with the Ministry of Education. The initiative entitled "Healthy China 2030" includes sexual health and sexual safety education and interventions, to reduce unintended pregnancies and sexually transmitted infections.

24. On the whole, these investments have involved shifting the emphasis since the age structure has changed in concert with the socioeconomic context, with continued emphasis on young people even as rapid ageing progresses. Ensuring a lifelong perspective on investment supports the realization of a second demographic dividend among ageing populations, which begins with better outcomes among young people.

Support for older persons

25. Older persons make up the fastest-growing age group in the global population, with projections suggesting that their numbers will more than double by 2050, at which point there will be more people 65 years of age and older than younger than age 15. More than two thirds of older persons live in developing countries.[14] Gender is a central consideration in ageing programmes; because of the difference in the life expectancy of men and women, most older persons are women. In addition, women generally bear much of the responsibility for the care of older persons within families and households.

26. Poverty-reduction and social-protection programmes for older persons receive significant attention, especially as societies age and older persons live longer and healthier lives. With increased population mobility and urbanization, and fewer

[13] Ibid., p. 18.

[14] United Nations, "Population ageing and sustainable development", *Population Facts*, No. 2014/4/Rev.1 (October 2015).

intergenerational households,[15] countries are seeing the provision of household-based social supports grow more challenging. A review of Asian countries showed high proportions of the population in several countries expecting social supports in old age to come primarily from personal savings and the State.[16]

27. Policy priorities for pensions have revolved around three key concepts: coverage, or the breadth of pension systems; adequacy, or the extent of the support that the pension systems provide to individuals and households; and sustainability, or how the pensions are financed over the short, medium and long term. As macroeconomic, social and political circumstances change, the relative balance of these three priorities changes as well.[17]

28. Recently, the focus in Latin America has been on pension adequacy. In Argentina and Chile, for example, there have been increases in benefits. In Colombia, 22 per cent of older adults live in poor households, in particular women, who spend a significant majority of their time in unpaid domestic work.[18] More than 40 per cent of those 60 years of age and older in Colombia are at a wealth level classified as "low" or "lower". The country has spent a decade implementing its "Red Unidos" strategy, a network of social protection against extreme poverty that targets 1.5 million households in poverty, providing State services to the most vulnerable families. A Red Unidos priority is to ensure that older persons and those with permanent disabilities have their own income. In 2015, the results included 13,245 older persons gaining literacy; 110,882 households being made aware of supports for interfamily and sexual violence; and 11,432 spaces generated for dialogue, conflict resolution and family cohabitation.

29. In the Eastern European and Central Asian regions, several countries have passed laws and enacted policies on discrimination, abuse and exclusion relevant to older persons. In 2012, the Republic of Moldova passed the Law on Equality, which focuses on preventing discrimination and ensuring equality and specifically mentions older persons in its article 1.[19] Kyrgyzstan passed a law in 2003 on the social-legal protection of the victims of family abuse, which includes specific provisions for older persons.[20] Eight of the twelve countries in the region that provided information for the World Health Organization (WHO) *Global Status Report on Violence Prevention 2014* reported that they had written legislation against elder abuse that was fully or partially implemented. Coverage of

[15] Albert Esteve, "Global trends in intergenerational coresidence", presentation at the United Nations expert group meeting on changing population age structures and sustainable development, New York, October 2016.

[16] Rafal Chomik, "Population ageing and social security in Asia", presentation at the United Nations expert group meeting on changing population age structures and sustainable development, New York, October 2016.

[17] Rafael Rofman, "Ageing and social security in Latin America", presentation at the United Nations expert group meeting changing population age structures and sustainable development, New York, October 2016.

[18] *Envejecimiento y Vejez en Colombia*, Encuesta Nacional de Demografía y Salud 2010 (Profamilia, 2013).

[19] Gender-Centru and HelpAge International, "Discrimination against older women in Moldova" (June 2013).

[20] UNFPA and HelpAge International, "Overview of available policies and legislation, data and research, and institutional arrangements relating to older persons: progress since Madrid" (New York, June 2011).

programmes to prevent elder abuse is more limited, however; Belarus and Albania are the only countries in the region to launch large-scale campaigns, that is, those reaching at least 30 per cent of target population.

30. Policies and programmes for older persons are also vital in countries with young age structures, where life expectancies are increasing dramatically. Ghana has implemented a number of interventions in support of older persons as part of the Madrid International Plan of Action on Ageing, 2002. These include a national fund on ageing; a national advisory committee on ageing to address issues faced by older persons; membership cards for priority access to services; access to free government medical services for those over 70 years of age; and provisions within the national gender policy for equity with regard to access by women to productive resources.

Addressing low fertility

31. In some countries, fertility levels have dropped to below, or even considerably below, the replacement level. There are many intersecting factors associated with below-replacement fertility, and a recent in-depth review by the Population Division of the Department of Economic and Social Affairs examined these factors in 18 countries that have experienced or continue to experience low fertility.[21] Perhaps the most consistent theme running through the case studies was that low fertility persists in middle-income and wealthier countries, where women and households face major challenges in balancing educational and career aspirations with having and caring for children.

32. In the labour market, flexibility was the key factor in limiting the decline of fertility, including the availability of part-time work and the ability to return to work after pregnancy and child-rearing. Affordable and accessible child care or, in some settings, the presence of extended family, enables women to return to work or school after childbearing. The same is true of tertiary education — the extent to which higher-education systems allow women to return and are affordable, as well as decisions by couples and resources for education, shape whether women can continue their education after breaks for childbearing.

33. A key question is the extent to which government policies and programmes can have a direct impact on fertility. In some cases, such as in the Netherlands and Norway, fertility has remained stable, at just below replacement, without direct efforts to increase it, likely due to a combination of generous social safety net policies — including housing supports, maternity and paternity leave, financial support for child care and highly subsidized education through tertiary levels — and significant workplace flexibility for women.[22] Other countries have pursued direct efforts to increase fertility from below-replacement levels, including through financial incentives. However, where these incentives are small in comparison with the costs associated with raising children, however, they have not produced significant changes in fertility levels.

[21] United Nations, "Cross-cutting issues and policies in countries experiencing low fertility", Policy Brief, No. 1 (2015).

[22] Ibid., "How has the Netherlands managed to sustain near-replacement fertility?", Policy Brief, No. 12 (2015).

34. Migration generally has a small impact on total fertility rates, in part because the fertility patterns of migrants gradually become consistent with those of the women in the destination country.[21] In some cases, for instance in the United States, migration can have a significant but temporary effect because of the concentration of migrants in reproductive ages; recent migrants may have higher fertility, but over a longer time horizon their fertility rates are closer to the national median in their destination country.[23]

35. Much research and experience suggest that policies that seek to bypass or go against individual fertility desires and choices are both counter to the Programme of Action and of limited impact. More effective policies focus on increasing well-being and making it easier for women and couples to have their desired number of children, with particular emphasis placed on gender equality, support for education and reconciliation of work and family life.[24] These policies return significant social and economic benefits regardless of their impact on overall fertility levels.

36. Part of supporting women and couples having the number of children they desire, an important part of sexual and reproductive health and reproductive rights, is addressing infertility. A recent WHO review showed that, among women 20 to 44 years of age who had been exposed to the risk of pregnancy, 1.9 per cent were unable to attain a live birth. Of the women who had had at least one live birth and were exposed to the risk of pregnancy, 10.5 per cent were unable to have another child.[25] An earlier review of developing countries showed 186 million women experiencing childlessness despite five years of attempting a pregnancy or a live birth, pointing out that while many couples face an unmet need for contraception, others struggle to have a child. People who experience infertility often face stigma or violence, and interventions and care for them have mostly been undertaken through private medicine and are therefore mostly inaccessible to the poor.[26]

B. Health

37. A hallmark of programmatic work on age structure and the demographic dividend involves investments in sexual and reproductive health and reproductive rights as a means of increasing the empowerment of women and girls and their ability to stay in school and pursue decent work. Yet the chance for millions of girls worldwide to realize their potential and contribute to development is derailed by child, early or forced marriage, unplanned pregnancies or poor access to health care, with spiralling impacts on educational attainment and labour-force participation.

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[23] Ibid., "What accounts for near replacement-level fertility in the United States?", Policy Brief, No. 19 (2015).

[24] Jana Vobecká, William P. Butz and Gerald Cirilo Reyes, Population Trends and Policies in the UNECE Region: Outcomes, Policies and Possibilities (UNFPA and International Institute for Applied Systems Analysis Policy Report, July 2013), p. 40.

[25] Maya N. Mascarenhas and others, "National, regional and global trends in infertility prevalence since 1990: a systematic analysis of 277 health surveys", *Public Library of Science (PLOS) Medicine*, vol. 9, No. 12 (December 2012).

[26] WHO, *Meeting to Develop a Global Consensus on Preconception Care to Reduce Maternal and Childhood Mortality and Morbidity* (Geneva, 2013).

38. Ill sexual and reproductive health has immediate consequences for the income of women and their households, and unwanted births tend to increase household poverty.[27] Approximately 16 million women 15 to 19 years of age give birth each year, or some 11 per cent of all births worldwide. In low- and middle-income countries, nearly 10 per cent of girls become mothers by the age of 16. Adolescents between 15 and 19 years of age represent 14 per cent of all unsafe abortions in low- and middle-income countries. Some 2.5 million adolescents have unsafe abortions every year, and adolescents are more seriously affected by related complications than are older women. Although adolescents 10 to 19 years of age represent 11 per cent of all births worldwide, they represent 23 per cent of the overall burden of disease (disability-adjusted life years) owing to pregnancy and childbirth. Pregnancy and childbirth are the leading cause of death among girls of this age in low-income countries.[28]

39. Access to sexual and reproductive health and reproductive rights, therefore, is not a sideline to inclusive and sustainable development; it is essential for the health of girls and women, their lifelong prospects and well-being, and their ability to contribute fully, at all ages, to sustainable development. When women and girls have access to sexual and reproductive health and their reproductive rights are promoted, in conjunction with education and gender equality, they also tend to have fewer children, resulting in the demographic transition (see A/69/62).

40. An increasing number of countries are recognizing these linkages and investing in expanding access to sexual and reproductive health as part of efforts to achieve a demographic dividend. The Sahel Women's Empowerment and Demographic Dividend regional initiative, the result of a joint initiative undertaken by the United Nations and the World Bank Group, is a response to a call made by the presidents of the six Sahel countries: Burkina Faso, Chad, Côte d'Ivoire, Mali, Mauritania and the Niger. These countries are prioritizing the demographic dividend because they face major human capital deficits coupled with rapid population growth. In addition, recurring conflicts, natural disasters and epidemics exacerbate poverty, perpetuate inequality and affect socioeconomic security and development in Sahel countries.

41. The initiative has three primary components: (a) generating demand for reproductive, maternal, neonatal and child health and nutrition services by promoting social and behavioural change and the empowerment of women and adolescent girls; (b) reinforcing the regional availability of reproductive, maternal, neonatal and child health and nutrition commodities and qualified health workers; and (c) reinforcing advocacy and dialogue at high levels and promoting policy development.

42. The social and behavioural change campaign is aimed at promoting the empowerment of women and adolescent girls by improving their knowledge; promoting voluntary family planning and access to and the use of reproductive, maternal, neonatal and child health and nutrition services and commodities; and ultimately increasing their educational and economic opportunities. The campaign

[27] Hakkert and others, *Impacts of Population Dynamics* (see footnote 9 above).

[28] WHO, *WHO Guidelines on Preventing Early Pregnancy and Poor Reproductive Outcomes among Adolescents in Developing Countries* (Geneva, 2011).

finances national programmes for the empowerment of women and girls, and to date has approved $73.4 million for programmes that focus on the economic empowerment of women, sexual and reproductive health and reproductive rights, and girls' education.

43. In 2013, UNFPA and the Swiss Agency for Development and Cooperation established a partnership to promote a healthy generation of adolescents and young people in southern Africa. The resulting programme, Safeguard Young People, is aimed at identifying and scaling up interventions for adolescents and youth, including improving policy and legal environments, strengthening integrated and youth-friendly HIV and sexual and reproductive health services, providing comprehensive sexuality education for in-school and out-of-school youth and ensuring meaningful youth participation and empowerment. The Programme prioritizes vulnerable communities within eight countries: Botswana, Lesotho, Malawi, Namibia, South Africa, Swaziland, Zambia and Zimbabwe.[29]

44. Between January and August 2016, more than 300,000 adolescents and young people were reached through social-behavioural change communication and comprehensive sexuality education programmes. Over the same period, nearly 40 million condoms were distributed to young people. A total of 7,767 stakeholders (Government officials, non-governmental organizations, community leaders and traditional leaders) received face-to-face training in comprehensive sexuality education by the end of August. More than 40 youth-led and youth-serving organizations had undergone capacity-building in 2015.

45. In 2015, UNFPA, with the University of Pretoria, conducted a review of laws and policies that affect adolescents and young people's sexual and reproductive health in eight Safeguard Young People programmes and 15 additional eastern and southern African countries. The review examined whether national laws and policies protect or impede the rights of adolescents and young people to access sexual and reproductive health, and whether these laws and policies are harmonized, contradict each other or have discrepancies that need to be addressed. This type of assessment provides a major contribution to monitoring target 5.6 of the Sustainable Development Goals through indicator 5.6.2.[30]

46. The assessment resulted in the development of a harmonized regional legal framework to be adopted by the Southern African Development Community (SADC) and subsequently by its member States. The resulting Model Law on Child Marriage acts as a yardstick and encourages Governments to be accountable for regional and international goals they have committed to. It is also an advocacy tool that assists policy makers and legislative drafters in addressing all the relevant areas in need of legislative reform without usurping the authority of national legislatures. The Model Law uses best-practice language that prevents loopholes in the law, and can be easily adopted or adapted by member States. The model law was developed through an extensive consultative process which culminated with its adoption by the SADC Development Community Parliamentary Forum in May 2016 during its General Assembly in Swaziland.[29]

[29] UNFPA, "Safeguard young people annual report, 2015".

[30] Indicator 5.6.2 is "number of countries with laws and regulations that guarantee full and equal access to women and men aged 15 years and older to sexual and reproductive health care, information and education, disaggregated by sex".

Information and education in Sustainable Development Goal target 3.7

47. Lack of access to education and information is strongly linked to ill sexual and reproductive health. For instance, globally only 34 per cent of young people can demonstrate accurate knowledge of HIV prevention and transmission. Furthermore, as is made clear in the International Conference on Population and Development beyond 2014 Framework of Actions, non-communicable diseases, and about 70 per cent of premature deaths among adults, are strongly associated with four behaviours that begin or are reinforced in adolescence: smoking, the harmful use of alcohol, inactivity and overeating or poor nutrition. Lifelong health education should begin with young people, both within school curricula and in concert with comprehensive sexuality education, as many life habits that affect long-term health are initiated and formed at young ages and are intertwined with aspects of identity formation and aspirations for adulthood (see A/69/62).

48. Comprehensive sexuality education is based on learning blocks that correspond to the evolving capacities of children as they get older. It builds skills that people use throughout their lives as they move from childhood to adolescence to adulthood.[31] Reviews of the efficacy of comprehensive sexuality education curricula show that those that emphasized gender and power were markedly more likely to reduce rates of sexually transmitted infections or unintended pregnancy than "gender-blind" curricula (see A/69/62). Evidence shows increased use of condoms and delayed sexual debut among young people who receive this education, which contribute to a reduction in the incidence of adolescent pregnancy.[32]

49. The HIV and AIDS Life Skills Education Programme in South Africa is designed to reduce young people's vulnerability to HIV infection and equip them with the knowledge and skills they need to make informed decisions about sexual behaviour. Its key dimensions include training for master trainers and teachers, peer education and care and support for people living with HIV. The themes of the curriculum include substance abuse, HIV/AIDS, sexual and reproductive health, gender equity and non-discrimination, peer pressure and assertiveness.

50. In addition, the Integrated School Health Programme, introduced in October 2012, is aimed at strengthening holistic school health services for learners in South Africa. By providing a more comprehensive package of services, it tries to address conditions that contribute to morbidity and mortality, as well as barriers to learning, among students. This multisectoral programme, jointly led by the Department of Health and the Department of Basic Education, enables students to access a variety of health services within the schools thanks to mobile outreach and strengthened referrals to community health facilities. Each student is assessed individually and regularly by a school health team led by a professional nurse. The nurse and the team provide sexual and reproductive health services, including contraception and HIV counselling and testing, where appropriate. The Integrated School Health Programme has strengthened the capacities of the primary health-care outreach

[31] More technical information on the components of comprehensive sexuality education can be found in UNESCO and others, *International Technical Guidance on Sexuality Education: An Evidence-Informed Approach for Schools, Teachers and Health Educators* (Paris, 2009).

[32] Virginia A. Fonner and others, "School-based sex education and HIV prevention in low- and middle-income countries: a systematic review and meta-analysis", *PLOS One*, vol. 9, No. 3 (March 2014).

teams, community health workers and Department of Basic Education district coordinators.[33]

51. Guatemala is implementing a programme, "Abriendo Oportunidades", to address high levels of adolescent pregnancy, especially among poor and less-educated girls living in rural communities. The programme, implemented by UNFPA and the Population Council, has reached 8,000 girls 8 to 19 years of age in 100 communities and has built a network of 100 young indigenous mentors. A quantitative household-level evaluation conducted in 36 communities documented that Abriendo Oportunidades has led to positive changes for disadvantaged girls, including sustained school enrolment, a greater desire among programme participants for continuing education, delayed marriage and a desire to delay childbearing.[33]

Age-based expansion of universal health coverage

52. Universal health coverage is a key component of Sustainable Development Goal 3, under target 3.8. As clearly stated in the framework of actions for the International Conference on Population and Development beyond 2014, "the importance of closely linking sound evidence on population dynamics, including population health data and factors that limit access to health care, to universal health-care planning cannot be overemphasized". Age structure and the targeting of relevant services is an important part. Also addressed in the framework of actions is the need to identify core components of essential rights-based sexual and reproductive health services, including through progressive realization of universal health coverage.

53. In 2004, the National Ministry of Health in Argentina initiated a programme, "Plan Nacer", aimed at improving health coverage and outcomes under the Millennium Development Goals. Plan Nacer was considered the primary means to fully implement Argentina's universal health coverage. Limits in access to coverage were evident in differential infant mortality rates within the population ostensibly covered under the country's universal health coverage. Plan Nacer focused on enrolment, access and quality through progressive expansion that was eventually structured around the differential needs of groups defined by age and gender. In 2012, the programme "Programa Sumar" (under Plan Nacer) focused specific attention on adding new age groups and appropriate services for children under 11 years of age, adolescents under 19 years of age and women between 20 and 64 years of age; in 2015, men 20 to 64 years of age were included.[34] With each age-specific expansion, corresponding tracers were added, as shown in figure IV.

[33] UNFPA, *UNFPA Operational Guidance for Comprehensive Sexuality Education: A Focus on Human Rights and Gender* (New York, 2014).

[34] People 65 years of age and older receive coverage through the social security system.

Figure IV
Programa Sumar tracers: performance indicators used to evaluate provincial systems

Area	*Indicator*
1. Early pregnancy care	Pregnant women seen before week 13
2. Pregnancy follow-up	At least 4 prenatal check-ups for pregnant women
3. Effectiveness of neonatal care	Survival for 28 days of children with birthweight between 750 and 1,500 grams
4. Follow-up of children under 1 year of age	At least 6 check-ups before the first year of age, as scheduled
5. Intraprovincial equity in the follow-up of children under 1 year of age	Measures equality in terms of health follow-up of children under 1 year of age within different regions of the same province
6. Capability to detect congenital heart disease in children under 1 year of age	Children under 1 year of age with congenital heart disease diagnosis reported to national coordinating referral centre
7. Follow-up of children between 1 and 9 years of age	At least 9 check-ups between 1 and 9 years of age, as scheduled
8. Immunization coverage at 24 months	Children at 2 years of age who received quintuple and polio vaccines between 1.5 and 2 years of age
9. Immunization coverage at 7 years of age	Children at 7 years of age who received triple or double viral, triple and polio vaccines between 5 and 7 years of age
10. Follow-up of adolescents between 10 and 19 years of age	At least one annual check-up between 10 and 19 years of age
11. Promotion of sexual and/or reproductive health rights	Adolescents between 10 and 19 years of age and women up to 24 years of age who take part in sexual and/or reproductive health workshops
12. Prevention of cervical cancer	Women between 25 and 64 years of age with advanced cervical lesions or carcinoma diagnosed in the past year
13. Breast cancer care	Women up to 64 years of age with breast cancer diagnosed in the past year
14. Evaluation of the process of care in cases of maternal and infant death	Evaluates the process of care in cases of maternal and infant death

Source: Available from http://phcperformanceinitiative.org/plan-nacerprograma-sumar-measurement-ensure-effective-universal-health-coverage.

54. Results from the expansion of coverage in Argentina show both an increased use of health services and an increased use under the universal coverage scheme.

with the gap between the two narrowing over the past five years. A key lesson learned from this effort was the importance of good data, including the selection of the appropriate tracer indicators and reliable baselines that could be tracked continually.

C. Place and mobility

55. Many important links exist between place and mobility and age structure, including through urbanization, internal and international migration, and displacement. For instance, in the outcome document of Habitat III, the New Urban Agenda, Member States committed to harnessing the urban demographic dividend by promoting the access of young people to education, skills development and employment to achieve increased productivity and shared prosperity in cities and human settlements. The New Urban Agenda also recognized the importance of urban planning that supports the rights, needs and aspirations of older persons.[57]

56. Global and national supports for displaced persons and refugees are a priority focus for age-focused interventions, given that the world is experiencing the highest numbers of internally displaced and refugee populations ever owing to conflict. Supporting adolescents and youth is especially important. Traumatized, constrained by tradition, and torn from school, family structures and familiar social networks, they can get lost in the crowd in a refugee camp or a disrupted community.[58]

57. Jordan has been the destination for well over 600,000 refugees. This massive influx resulted in the opening of the Za'atari refugee camp in 2012. As at 6 July 2015, the camp sheltered a total of 81,405 residents, including 22,080 girls and 23,520 boys. Although more than 1,400 small businesses have flourished there, refugees in Za'atari have scarce access to income-providing activities and very limited educational and recreational opportunities, which has a huge impact on the day-to-day experiences and future prospects of adolescents and youth. The 2015 regional response plan highlighted that only 8,541 individuals of the planned 111,000 (8 per cent) had participated in employment-assistance or income-generation activities. Only 31,681 individuals of the planned 177,000 (18 per cent) had participated in technical or vocational training, literacy initiatives, or life-skill training.

58. Protection actors are working with the Government of Jordan to identify opportunities and programmes for Syrian refugees that promote resilience, empowerment, self-reliance and positive coping strategies in both camp and non-camp settings. Within this aim, programmes that involve youth 16-24 years of age and women as active participants are particularly important. Life in crisis zones implies the absence of role models, the breakdown of social and cultural systems, personal trauma, including, very often, the loss of family members, exposure to violence, and the disruption of school, friendships and personal dreams. In this context of turbulence and uncertainty, the creation and promotion of safe areas that

[57] Related resources and programmes can be found in WHO, *Global Age-Friendly Cities: A Guide* (Geneva, 2007).

[58] UNFPA, "Adolescent girls in disaster and conflict: interventions for improving access to sexual and reproductive health services (New York, 2016).

involve the participation of youth is essential to addressing the many concerns of young people, in particular those pertaining to sexual and reproductive health matters in emergency settings.

59. UNFPA has partnered with the organization Questscope in Jordan to establish Y-Peer Jordan, a network of volunteers inside the refugee camp focusing in particular on adolescent sexual and reproductive health and reproductive rights. The networks created around these cadres of volunteers involve the community in a participatory manner, which gives a sense of purpose to the daily lives of young refugees. Preliminary results have been promising. A core group of young volunteers has been trained and assigned tasks to carry out in the camp focusing on youth and adolescent mobilization and case management. A network linking youth among different organizations has been established to reinforce peer-to-peer mechanisms and cope with turnover among volunteers. Peer-to-peer methodology prioritizes the participation of adolescents and youth in the design and implementation of activities. As a result, it is one of the few initiatives in Za'atari that is entirely led by young people.

D. Governance and accountability

60. The field of population and development and the Programme of Action have been major drivers of expanding data systems and strengthening the evidence base for decision-making. At the centre of the 2030 Agenda and its indicator framework is the need to significantly expand the effective use of national and subnational population data. Core demographic data — census and civil registration and vital statistics, together with household surveys — are still underutilized in situation analysis and decision-making.

61. Some countries are unable to generate core demographic data owing to conflict. In Afghanistan, the Government is partnering with UNFPA and the Flowminder Foundation to expand the national census, which could be carried out in only a subset of provinces owing to security risks. Using satellite imagery and existing household surveys, the team has generated algorithms that enable the estimation of households in areas with satellite imagery, but no household data. This exercise provides a more extensive overall count of the population and estimates of broad age groups by sex, which are vital to targeted programming.

62. The *Global Monitoring Report 2015/2016*[17] examined the links between age structure, demographic transition and development goals, bringing together relevant data and categorizing countries according to their age structure and change. In close partnership with national Governments, UNFPA has built on this work to develop national demographic dividend profiles for tracking current and projected age structure and data on human capital. Growing capacity in use of census data is allowing expansion into subnational mapping and projections of age structure. Where the data allow, countries have undertaken analyses to generate national transfer accounts, and interest in tracking intergenerational transfers appears to be increasing.

[17] World Bank Group, *Global Monitoring Report 2015/2016: Development Goals in an Era of Demographic Change* (Washington, D.C., 2016).

64. In Nepal, UNFPA has conducted an analysis on key subnational disparities among the needs of young people. Using the 2011 Nepal Integrated Public Use Microdata Series census data to examine population age structure at the district level, a demographic dividend index was constructed on the basis of the "EEE" framework of empowerment, education and employment investments needed to advance prospects for a demographic dividend. Forward-looking simulations have illustrated the impact of different policy scenarios to promote development.[38]

64. In a more expansive exercise, the Government of Zambia has partnered with UNFPA to generate district-level development indicators to inform the forthcoming seventh national development plan. Attention to age structure at subnational levels showed urban clustering of young adults and allowed the generation of both proportionate risks and actual numbers of young people at risk within each district of events, such as child, early and forced marriage; adolescent pregnancy; school dropout; and unemployment. Drawing on the 2010 Population and Housing Census, 2011-2035 population and demographic projections and the Health Management Information System, the analysis provided the basis for a meeting on national investment, including policies and programmes to realize the demographic dividend in Zambia, in December 2016.

E. Sustainability

65. The world faces many urgent acute and chronic environmental concerns, in particular climate change, given its enormous disruptive effects on prosperity and people's ability to escape and stay out of poverty. Age structure has important implications for the climate-related vulnerability and resilience of societies, both nationally and locally, and has become part of how countries diagnose and address a wide range of risks. Children and older persons experience heightened yet differential vulnerability, both in general and depending on the specific type of hazard. For instance, research shows that 88 per cent of the global burden of disease related to climate change, such as vector-borne diseases, diarrheal and respiratory disease, falls on children.[39] In heat waves in the United States and France, impacts on older persons have been greater due to social isolation, in particular in urban areas, which are associated with lack of access to extended social networks and family support structures.[40] Disproportionate poverty among children and older persons also produces greater vulnerability.

66. The Information for Risk Management Index, a widely used global approach to assessing risk, is currently being applied for humanitarian, climate adaptation and disaster risk reduction uses. The Index incorporates vulnerable groups, including both children and older persons. UNFPA has worked with Governments to incorporate population into national and local climate change adaptation planning,

[38] Xuejun Zhang, Edilberto Loaiza and Rachel Snow, "Sub-national estimates of human capital indicators: localizing investments for the demographic dividend", *African Population Studies*, vol. 30, No. 2 (2016).

[39] Perry E. Sheffield and Philip J. Landrigan, "Global climate change and children's health: threats and strategies for prevention", *Environmental Health Perspectives*, vol. 119, No. 3 (March 2011).

[40] Jon C. Semenza and others, "Heat-related deaths during the July 1995 heat wave in Chicago", *The New England Journal of Medicine*, vol. 335, No. 2 (July 1996).

including age-specific targeting in exposed areas. Depending on the context and the type of hazard, the dependency ratio (the ratio of children plus older persons to those in between) at the local level has been used as an input to risk assessment in Bolivia (Plurinational State of), Indonesia and Malawi. The results are linked with health infrastructure data to evaluate the access of the vulnerable group to health services.[41]

IV. Conclusion

67. In his report on the framework of actions of the International Conference on Population and Development beyond 2014, the Secretary-General provided a proposal for an integrated approach to sustainability, driven by a set of pathways cutting across all of the pillars, with a foundation in ensuring dignity and human rights for all. The second pathway is investment in lifelong health and education, especially for young people and sustained across the life course. He stated that lack of education and ill health were the most common risk factors and manifestations of poverty, curtailing economic growth and human well-being and limiting the capability of both individuals and societies to innovate and thrive in a changing world". He also showed that the outcomes of policies and programmes during periods of young age structure greatly influenced long-term development trajectories, including as countries experienced ageing.

68. Age structural change brings concerns for many, in particular that there will not be sufficient jobs and services for large numbers of young people, or that economies may suffer as the number of older persons increases. These concerns can be especially pronounced when age structures change rapidly. Age structure change reflects great achievements, including broader access to education, gender equality and sexual and reproductive health, and reductions in mortality among children, mothers and older persons. Although the drivers are positive, the cost of inaction, of not accounting for and adapting to age structure changes, will be high, as demographic trends can exacerbate existing gaps in development if people are concentrated in ages that lack services and investments. This mismatch produces long-term legacies of missed human capabilities and lost chances for development.

69. The present report has highlighted policies and programmes in place in diverse countries that have been successful in accounting for the age of beneficiaries and the age structure of the population, with results that spur demographic dividends associated with both youthful and ageing societies. With good data and effective research, the sharing of experiences across countries and proactive policies and programmes, age structure changes can be a critical part of achieving poverty reduction, prosperity and broad-based sustainable development.

[41] George Martine and Daniel Schensul, eds., *The Demography of Adaptation to Climate Change* (UNFPA, International Institute for Environment and Development and El Colegio de México, 2013); and Wahyu Mulyana and others, *Urbanisation, Demographics and Adaptation to Climate Change in Semarang, Indonesia* (London, International Institute for Environment and Development and UNFPA, 2013).